

ON THE LIPARIS (TRISMEGISTUS) OWSTONI JORDAN
AND SNYDER.

By PETER SCHMIDT,

Of the Academy of Sciences, St. Petersburg.

There was recently described by Prof. David Starr Jordan and J. O. Snyder^a a new Liparidid from the deep waters of Japan, which they believed to represent a new genus and species, namely, *Trismegistus owstoni*. By chance a second specimen of this interesting and undoubtedly new form is in a collection of Japanese fishes which I brought home from my journey to Japan in 1901, and so I can in some respects complete the description given by the previously mentioned authors.

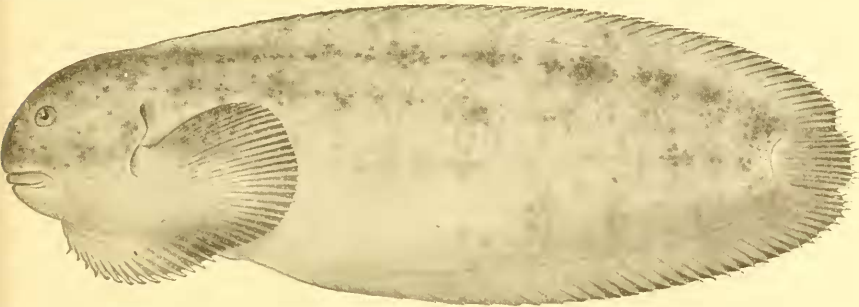


FIG. 1.—LIPARIS OWSTONI.

A minute comparison of my specimen with the original description has shown that it is undoubtedly the same form as that described, but I can not agree with the opinion of President Jordan and Mr. J. O. Snyder that it must be regarded as representing a new genus, differing from *Liparis*. This new genus differs from *Liparis*, according to these eminent American ichthyologists, only "in having the skin rough with prickles, with broad, rounded bases like thumb tacks." This peculiarity can of course be regarded as a generic one, but I must call

^a On a Collection of Fishes made by Mr. Alan Owston in the Deep Waters of Japan. *Smiths. Miscell. Coll.*, XLV, 1904, p. 238, pl. LVIII.

attention to the following facts: We know another *Liparis* which has the same peculiarity. It is covered, and often very densely covered, with osseous prickles. It is regarded as a variety of a very common Arctic species, *Liparis fabricii* Kröyer (= *L. tunicata* Reinhardt). Long ago this form was described by C. F. Lütken^a as *Liparis fabricii* Kröyer forma *leprosa*^b and figured by him on his Plate XV, fig. 5. In the zoological museum of the Imperial Academy of Sciences of St. Petersburg we have some still undescribed specimens of this variety, brought by Mr. N. M. Knipovitch from Murman, on the coast of Lapland. By the kind permission of Mr. Knipovitch I have compared the structure of the prickles of both forms. The prickles of *Liparis fabricii leprosa* are exactly like those of the Japanese form. They are also armed each with a sharp spicule, but the plate is not so flat as in *Liparis oustoni*. It is more conical, though of the same character. It has even the same radiating striations. I believe that if a peculiarity is not even of a specific value (other varieties of the same *Liparis fabricii* have no such prickles at all) it can not be taken as the distinction of a genus. In all other respects the new Japanese form is a true *Liparis*, of course of gigantic dimensions, but entirely like—for instance, *Liparis agassizii* Putnam—as already mentioned by Prof. D. S. Jordan and J. O. Snyder.

My specimen is a little larger than the type; its total length is 457 mm.; length to base of caudal fin, 417 mm.; it is a full-grown female filled with eggs, which was purchased by me in the fish market at Nagasaki, in April, 1901, and is now catalogued in the ichthyological collections of the zoological museum of the Imperial Academy of Sciences in St. Petersburg as No. 13173. Japanese fishermen have informed me that it is a very rare form, with no Japanese name.

The fin formula of my specimen is D. 42, A. 34, P. 43, C. 10; head $4\frac{1}{5}$ in length measured to base of caudal fin; depth 5; eye 10 in length of head; snout $2\frac{1}{10}$; width of mouth $1\frac{2}{5}$; width of interorbital space $2\frac{1}{10}$. It differs from the described species by the width of the interorbital space, which is a little larger ($2\frac{1}{10}$ instead of $1\frac{3}{4}$), but I have no doubt that this is a difference of individual or possibly a sexual character (the sex of the described species is not given by the authors).

Interorbital space flat; gill rakers 1 + 7, like warts covered with setae, placed in a double row on the inner and on the outer side of a gill arch; width of gill opening contained $2\frac{1}{3}$ times in the length of head; origin of dorsal at a vertical passing through a point about one

^aChr. F. Lütken. Et Bidrag til Kundskab om Kara-Havets Fiske. Djinphna Tagtets Zool.-Bot. Udbytte: Kjöbenhavn, 1886.

^bApparently *Liparis fabricii* belongs to the same group (*Trismegistus*) as *L. oustoni*. To settle finally the question of the generic value of these prickles, we should know under what conditions *L. fabricii* is without prickles; whether these structures be seasonal, sexual, dimorphic, rudimentary, or on localized individuals. In other words, what is the real significance of Lütken's "forma *leprosa*."—D. S. J.

diameter of eye behind base of pectoral; origin of anal below tenth dorsal spine; both fins united with the caudal, but their tips reaching to the end of second third of the length of caudal, and not as described and figured by Messrs. Jordan and Snyder. The caudal fin of the American specimen (see fig. 1) conveys the impression that it has been broken on the tip and restored by the artist.

Skin thick and loose, in irregular folds, covered with thumb tack-like plates which make it rough; a broad longitudinal band on the side in the middle between dorsal and anal smoother. These plates cover also the outer side of basal parts of pectoral fins; caudal not convex

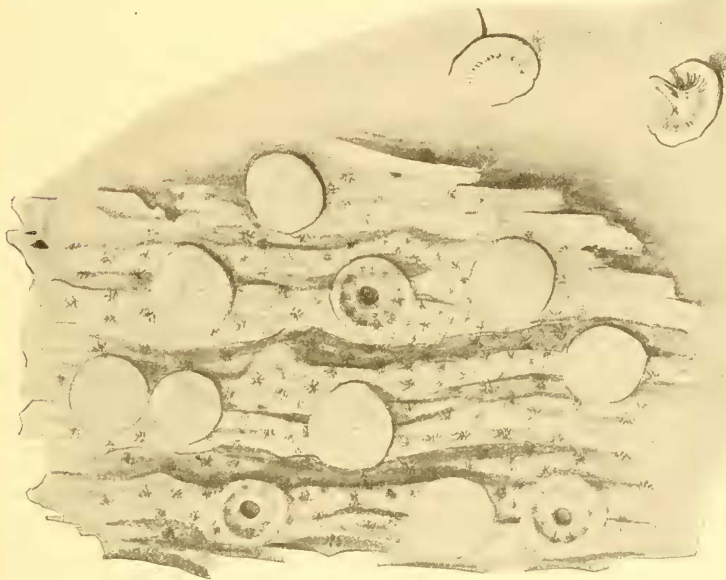


FIG. 2.—*LIPARIS OWSTONI*, SKIN WITH PRICKLES.

posteriorly, the posterior margin of the fin completely truncate; pectorals as described by Messrs. Jordan and Snyder. Disk oval, with thin margins; its longitudinal diameter contained $2\frac{5}{8}$ times in the length of head. The distance of the anal opening from the hind margin of the disk is equal to the width of the mouth. Color gray-yellowish, clouded with darker gray and blackish on the dorsal side; margin of the hind part of dorsal, caudal fin, and anal with base of them blackish; pectoral dark gray, on the inner or posterior side blackish.

I believe that all of these slight discrepancies noted above do not indicate specific difference, and that my specimen belongs to the species *Liparis* or *Trismegistus owstoni*.